## We Claim:

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- 1. A method for remediating manure-contaminated material which comprises:
- a. providing a mass of manure-contaminated material including in situformed bacteria and nitrogen-containing materials;
- b. acidifying said mass of manure-contaminated material to a pH of not more than about 7.0 without destroying a substantial portion of said active bacteria and/or without liberating a substantial portion of said nitrogen-containing materials:
  - c. particularizing said acidified manure-contaminated material; and
- d. treating said particularized, acidified manure-contaminated material with at least one chemical amendment to form a treated particularized manure-contaminated material.
- 2. The method of claim 1, wherein acidifying of said mass of manure-contaminated material comprises neutralization.
- 3. The method of claim 1, wherein the mass of manure-contaminated material is acidified with sulfuric acid and/or phosphoric acid and/or citric acid.
- 4. The method of claim 1, wherein the step of particularizing comprises microenfractionating the mass of manure-contaminated material.
- 5. The method of claim 1, wherein said chemical amendment comprises at least one nutrient.
- 6. The method of claim 1, wherein the treated particularized manurecontaminated material comprises a fertilizer.
- 7. The method of claim 1, wherein the acidified manure-contaminated material is entrained in an air stream during the particularizing step.
- 8. The method of claim 1, wherein the acidified manure-contaminated material is entrained in a vortex-type air stream which transports the entrained treated contaminated material in a generally circular path.
- 9. The method of claim 1, wherein the particularizing step comprises homogenizing and aerating the acidified manure-contaminated material.

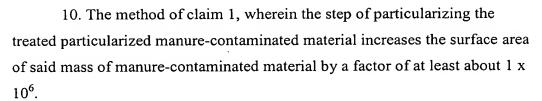
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- 11. The method of claim 1, which further includes the step of discharging the microenfractionated treated contaminated material from the air stream and redistributing it throughout a soil matrix thereby substantially increasing the surface area of the soil matrix.
- 12. The method of claim 1, where the chemical amendment comprises a liquid solution.
  - 13. A method for remediating manure-contaminated material which comprises:
  - d. providing a mass of manure-contaminated material including in situformed bacteria and nitrogen-containing materials;
  - e. acidifying said mass of manure-contaminated material to a pH of not more than about 7.0 without destroying a substantial portion of said active bacteria and/or without liberating a substantial portion of said nitrogen-containing materials;
    - f. microenfractionating said acidified manure-contaminated material; and
  - d. treating said microenfractionated, acidified manure-contaminated material with at least one nutrient to form a treated microenfractionated manure-contaminated material.
  - 14. The method of claim 13, wherein acidifying of said mass of manure-contaminated material comprises neutralization.
- 15. The method of claim 13, wherein the mass of manure-contaminated material is acidified with sulfuric acid and/or phosphoric acid and/or citric acid.
- 16. The method of claim 13, wherein the step of particularizing comprises microenfractionating the mass of manure-contaminated material.
- 17. The method of claim 13, wherein said chemical amendment30 comprises at least one nutrient.



- 18. The method of claim 13, wherein the treated particularized manurecontaminated material comprises a fertilizer.
- 19. The method of claim 13, wherein the acidified manure-contaminated material is entrained in an air stream during the particularizing step.
- 20. The method of claim 13, wherein the acidified manure-contaminated material is entrained in a vortex-type air stream which transports the entrained treated contaminated material in a generally circular path.
- 21. The method of claim 13, wherein the particularizing step comprises homogenizing and aerating the acidified manure-contaminated material.
- 22. The method of claim 13, wherein the step of particularizing the treated particularized manure-contaminated material increases the surface area of said mass of manure-contaminated material by a factor of at least about 1 x  $10^6$ .
- 23. The method of claim 13, which further includes the step of discharging the microenfractionated treated contaminated material from the air stream and redistributing it throughout a soil matrix thereby substantially increasing the surface area of the soil matrix.
- 24. The method of claim 13, where the chemical amendment comprises a liquid solution.

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